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ABSTRACT

This three-part report describes the data collected during Fall 1979 in a longitudinal study of 5,892 students at 15 California community colleges. Chapter I describes the background of the study in terms of the research procedures used (i.e., sampling, interviewing, data collection instruments, data transmittal and analysis): goals and objectives: and the progress made in 1978-79 towards meeting these objectives. Chapter II describes and compares vocational and non-vocational students and students in attendance in Fall 1979 and former students not in attendance at that time. Tables provide comparisons in terms of demographic variables of age, sex, marital status, and dependents: work variables, such as job type, wages, and courses' relatedness to career: and academic variables, including courses attempted and passed, grade point average, major, goals, and current activities. Chapter III offers descriptions, data, and comparisons, when appropriate, of the following special student groups: financially disadvantaged, educationally disadvantaged, limited English speaking, displaced homemakers, non-traditional majors, ethnic populations (i.e., American Indian/Alaska Native, Asian/Pacific Islander, Black, Hispanic, White, and other), and the handicapped. (AYC)

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STATEWIDE LONGITUDINAL STUDY

Report on Academic Year 1979-80

Part III - Fall Results

Funded by the Chancellor's Office
California Community Colleges
under P.L. 94-482, Title II, Part A

Project # 19-64741 - 3 - 0 - 453

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STATEWIDE LONGITUDINAL STUDY

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REPORT ON THE STATEWIDE LONGITUDINAL STUDY, Part 3, Fall 1979

Chapter 1. Introduction and Background of the Study

This report describes the results of data collection during Fall 1979 for the Statewide Longitudinal Study (SLS). It is the third in a series of reports on that project (Hunter, R. and Sheldon, M. S. 1979; Sheldon, M.S. and Hunter, 1979). Part 1 described the base data collected in Fall, 1978, Part 2 the data from Spring, 1979. The SLS has been projected to continue for three academic years, through Spring 1981.

This document has three chapters. The remainder of the present chapter describes the background of the study in terms of the research procedures, the goals and objectives, and the progress made during the first year (1978-79).

Chapter two has three sections; descriptions and comparisons of students on (1) demographic variables, (2) work variables, and (3) academic variables. The comparisons are made between Vocational and Non-Vocational students, and between students in attendance in Fall 1979 and former students not in attendance.

Chapter three will give descriptions, data and comparisons, when appropriate, of special student groups:

1. Financially Disadvantaged
2. Educationally Disadvantaged
3. Limited English Speaking Ability
4. Displaced Homemakers
5. Non-traditional Majors
6. Ethnic
7. Handicapped

Detailed descriptions of these groups will be the subject of Part 4 of the SLS report.

Procedures

The participating 15 colleges collect data from a random sample of students enrolled for the first time in Fall, 1978. The data come from two sources; college records and telephone interviews. The overall purpose of the study is to define and describe the effect of community college study on the lives of the students. A complete description of the goals, objectives and procedures will be found in the project manuals for Fall, 1978; Spring, 1979; and Fall, 1979; and in the SLS Report Part 1, Fall, 1978.

Sampling

Each of the participating colleges selected a random sample of students newly admitted in Fall, 1978, large enough to reduce the sampling error to 4%. Using freshmen reported on Form CCAF131 and criteria in the Student Accountability Model Manual (Gold, 1978), an oversize sample was drawn to allow for attrition between registration and 1st Census Week, Fall 1978. Those who had zero active units by Census Week were interviewed once. The results were reported in the SLS report, Part 1. Those neither reached nor enrolled in Spring, 1978 were excluded from current analysis. Sample size for this report is 5,892.

Interviewing

Telephone interviews were conducted, using common data sheets, interview guides, definition sheets and coding instructions. There were differences in some of the questions asked of those in attendance and those not attending. Solutions to problems arising during data collection were disseminated to the participating colleges through frequent newsletters.

Data Collection Instruments

Date collection instruments were originated by the consortium and prepared at the state project office for use. Data collection policies were set by the consortium, reviewed by the project director and the instruments were prepared by the project administrator. Draft copies were circulated to consortium members and field tested before final drafts were printed.

Data Transmittal

Punched data cards were checked for logic and outlier errors prior to storage. Feedback and correction sheets were provided to the participating colleges before Fall 1979 data were merged with data from previous semesters.

Data Analysis

Two programs from Statistical Package for the Social Sciences (SPSS) were used for data analysis: FREQUENCIES and CROSSTABS. The former were used to provide frequency distributions of particular aspects of the sample or a subgroup. The latter were used to describe or to test for relationships between variables, e.g., crosstabulating SEX by ETHNICITY.

Goals and Objectives

The goals and objectives shown below are those for the initial year of the study. The discussion indicates which have been already met, which partially met, and which cannot be completely met.

The overall goals and objectives of the study were:

1. To provide detailed information about all pertinent aspects of their student body.

   ### Objective 1A

   To produce frequency distributions and cross-tabulations of descriptive and demographic student data and compute appropriate statistics.

Objective 1A was met, in part, during the first year of the study. Data were collected on sex, age, ethnicity, marital status, dependents, educational background and level of educational achievement. Frequency distributions on these data and on comparisons between groups, e.g., men and women, were included in the SLS Report, Part 1. Further information on the demographics of the sample will be included in this and subsequent reports.

Objective 1B

To report detailed reasons given for specific student actions:

a. Being admitted to college and never enrolling in classes.

b. Enrolling in classes, but never attending.

c. Attending classes, but withdrawing or being excluded.

Objective 1B was completely met during the first year of the study. The necessary data were gathered, and the results reported in the Statewide Longitudinal Study 1978-79 Report, Part 1.

Objective 1C

To determine existing sex, race or age bias in occupational programs.

Objective 1C was met, in part, during the first year of the study. Results were reported in the Statewide Longitudinal Study Report for 1978-79, Part 1. So few students reported instances of discrimination based on sex, race or age bias during the first year of the study that few reliable statistics could be reported. It is possible that evidence of bias may become evident when students have spent more time in the participating colleges. Attention will be paid to this variable during the current and subsequent year of the study.

2. To provide data about the effects of the college programs on the lives of students.

Objective 2A

To compare success of Vocational and Non-Vocational students after one, two, and three years as measured by:

a. Skill level of employment in field studied.

b. Salary

Objective 2A was addressed during the first year of the study and will continue to be examined until the study in completed in Spring 1981.

Objective 2B

To compare and contrast perceptions concerning the value of community college experience among students.

This objectives was met during the first year of the study and reported in the Statewide Longitudinal Study Report 1978-79, Parts 1 and 2.

3. To provide information on the efficacy of small-sampling in completing a useful and meaningful longitudinal study.

Objective 3A

To compare demographic data of samples with those of populations at each participating college.

This objective was met in the first year of the study. Comparisons were made on each campus between the sample drawn and the total population of the college on demographic variables. The data, reported in the Statewide Longitudinal Study, Part 1, showed that the sample was slightly younger than the college population as a whole, but was otherwise similar.

4. To provide information about the feasibility of using a small-sample longitudinal study, i.e., supply information to state and federal agencies.

Objective 4A

To determine the congruence of federal and state reports when the data are estimated from the total student body, and when they are extracted from the study.

This objective was met, in part, in the first year of the study. Sample data from the 15 participating colleges on demographic variables of age, sex, and ethnicity indicated that the proportions in the sample were very close to the proportions in the 106 community colleges which reported to the State Chancellor's Office. This information is included in the Statewide Longitudinal Study Report 1978-79, Part 1.

5. To define and describe the factors within certain programs that inhibit Limited English Speaking and Non-English Speaking students from enrolling.

Objective 5A

To provide detailed information from Limited English Speaking Ability (LESA) students about the factors within the local education agencies that are perceived to be discriminatory.

This objective was met, in part, in the Statewide Longitudinal Study, Parts 1 and 2, and will be addressed further in this report. The objective cannot be met completely. Data gathered in 1978-79 show that very few Non-English Speaking students enroll in community colleges. Whether this is because they are not aware of the service, are inhibited from enrolling, seek English as a Second Language programs in Adult High School, or have other reasons for not enrolling can only be a matter of conjecture. This paper will include some of the problems encountered by Limited English Speaking students in their college work.

6. To identify needed curricula and services for vocational educational programs for disadvantaged or handicapped students (Topic 7 of the 1978 Proposal Guidelines).

Objective 6A

To obtain detailed information from disadvantaged and handicapped students regarding specific changes in curricula and services that will make vocational programs more attractive to them and more feasible for them to complete.

Objective 6B

To provide detailed information on the ways programs can be changed so that displaced homemakers, single heads of household, homemakers working part-time and students in programs non-traditional for their sex can enroll in and complete programs satisfactorily.

Objectives 6A and 6B can only be partially satisfied. Data were collected during the 1978-79 phase of the study, and were reported in the Statewide Longitudinal Study, parts 1 and 2. Further data were collected in Fall, 1978, and will be included in this report. However, generalizable data are not available on some of the special groups above because they form too small a proportion of the sample. It is recommended that separate longitudinal studies be made on handicapped students, displaced homemakers, and students in non-traditional programs for their sex, selecting representative samples of each group.

The above recommendation does not imply that the SLS sample is biased. Data from, and discussions with, community college administrators indicate that the proportions of each of the groups listed above are very small, probably less than 1% of the total population of students.

Given the overall size of the SLS sample, and the size of the samples in the individual colleges, the numbers of some groups of special students are too small for reasonable data analyses.

Even aggregated data produce an insufficiently broad collection of problems and solutions for generalizing.

Summary

Goal 1, Objective 1A, collection and dissemination of demographic information about the sample, has been partially met. The unmet portion of this goal requires longitudinal reporting, the semester-by-semester record of the deomgraphics of subsets of the sample, e.g., attending and non-attending members, as the study progresses.

Objective 1B was completely met during the first year of the study. Objective 1C has been partially met. Like Objective 1A, it can only be met in the ensuing years of the study.

Goal 2, the effects of college upon the lives of the members of the sample, and their perceptions of these effects, has been partially met. Baseline information on incoming students was collected during the first year of the study; complete information will be available at the end of the study, when outcome information can be collected and the two sets of data compared.

Goals 3 and 4, feasibility of the use of small samples, were met during the first year of the study using comparisons between sample and statewide demographic data. These comparisons made on age, sex, and ethnic status showed that sample data and statewide census data were sufficiently close to support the argument that sample data could produce information equivalent to statewide census data.

Goal 5, factors inhibiting Limited English-Speaking and Non-English-Speaking students cannot be met completely because of the

small numbers of the latter who are enrolled. Data concerning the difficulties encountered by the former group were collected during the first year of the study and reported in the Statewide Longitudinal Study Report 1978-79, Part 1. Further information on these problems will be included in the current report.

Goal 6, collection of information on difficulties encountered by disadvantaged, handicapped, displaced homemakers and those in programs non-traditional for their sex cannot be met completely. Information was collected on problems encountered by these groups, but it was found that some of them exist in too small numbers in the sample for meaningful discussion.

Student Prototypes

After a year and a half of participating in the study, the project management and the consortium have evolved an additional objective:

> 7. To develop and define prototypes of community college students that will permit a description of the educational activities in which California Community Colleges are engaged.

Discussion of 16 tentatively identified prototypes was included in the Statewide Longitudinal Study 1978-79 Report, Part 2. These prototypes were further refined during the academic year 1979-80. Prototyping of all students in the sample will be done during Spring, 1980 data collection. The results of this process will be included in the Statewide Longitudinal Study 1979-80 Report, Part 5. In response to suggestions from consortium members, the titles of these prototypes have been changed. Old and new titles are shown below.

New Title	Old Title
Full-Time Transfer	Scholar
Part-Time Transfer	Part-Time Scholar
Transfer Technical Major	Vocational Transfer
Unmotivated Transfer	Would-Be Scholar
Intercollegiate Athlete	Jock
Financial Support Seeker	Moneygrubber
Career Program Completer	Journeyman
Job Seeker	Job Seeker
Improving Skills Student	Job Upgrader
Second Careerist	Second Career Student
License Maintainer	License Maintainer
Leisure Skills Student	Hobbyist
Education Seeker	Course Taker
Art & Culture Student	Culture Buff
Explorer/Experimenter	Explorer
Basic Skills Student	(New Prototype)
Lateral Transfer Student	(New Prototype)

Chapter 2

Demographic, Work and Academic Variable Findings

In this and the following chapter, comparisons will be made between Vocational and Non-Vocational students, and between Attending and Non-Attending students. This chapter will contain demographic, work and academic findings; the following chapter will contain information on seven special student groups.

The definition of Vocational and Non-vocational students is that developed for the Student Accountability Model (SAM) (Gold, 1978). For this report, the SAM definition has been modified so that students in Class 3, "possibily an occupational major," are considered Non-Vocational. The logic underlying this decision is that if, after three semesters, a student has enrolled in no more than one beginning occupational course, it is extremely unlikely that the student plans to pursue a career in the field of that course.

For Chapter 2, each variable will first be presented in a nine-column table using the format in Figure 1 below. The table entries are percentages with the exception of the rows labeled "Valid Cases" and "Sample Size." The top row represents all those on whom valid data were collected for that variable; the second row represents all the students falling into that category, e.g., Vocational Attendees. The percentages shown relate to the first number, Valid Cases, and add to 100%. The percentages in brackets are in the "Missing Data" category, and relate to all the students falling in the category, Sample Size.

The Missing Data category includes non-applicable, erroneous and missing responses. All percentages are rounded to the nearest whole number.

The reader will note that the number of Attendees plus the number of Non-Attendees sum to less than the total sample size. This has occurred because the algorithm for making the distinction was unable to classify a small proportion of the sample. The same explanation holds for the Vocational and Non-Vocational students. The sum of these will be consistently less than the total.

Figure 1
Format for Tables

Variable #

ITEM DEFINITION

Valid Cases	VOCATIONAL			NON-VOCATIONAL			TOTALS		
	0	0	0	0	0	0	0	0	0
Sample Size	0	0	0	0	0	0	0	0	0
	ATT.	N-ATT.	TOTAL	ATT.	N-ATT.	TOTAL	ATT.	N-ATT.	TOTAL
Level 1 *	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Level 2 *	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)

Comparisons between Vocational and Non-Vocational students will be made by contrasting columns (c) with (f); between Attendees and Non-Attendees by contrasting (g) with (h). When appropriate, the interaction between Vocational and Non-Vocational and Attendee/Non-Attendee will be examined in one or more four-fold tables. Measures of central tendency and variability will be given when they are warranted and were computed on ungrouped data.

*Definitions of levels will be found in SLS Reports, Parts 1 and 2.

Comparisons will be made on all Demographic and Work Variables. For these variables, comparisons will be made only between Vocational and Non-Vocational Students. Information from Non-Attendees on the extent to which their goals were met and on their perceptions of college training will be included.

Demographic Variables

Tables 1 through 4 describe and compare sample students on the variables AGE, SEX, MARITAL STATUS, and NUMBER OF DEPENDENTS. An examination of the AGE distribution (Table 1) shows that although there is little difference between Vocational and Non-Vocational students (means of 26.4 and 26.1, respectively), those students in attendance are considerably and significantly younger (mean equals 24.5) than those not in attendance (mean equals 28.3). This difference in AGE between the Attendees and Non-Attendees is related to a number of other differences in this and other sections of the report. For instance, while 73% of the Attendees were never married, only 49% of the Non-Attendees fall into that category (see Table 3). As expected, the older Non-Attendees have significantly more dependents than the Attendees (see Table 4).

One can speculate on the reasons for this discrepancy in age and its related variables. Many students who take courses for their own self-interest; e.g., to pursue hobbies, or to enjoy specific cultural opportunities, enroll in but one or two courses and are periodic students. These are often "older students," well over 30.

Table 2 shows some differences in sex ratio for Vocational and Non-Vocational students as well as those Attending and Non-Attending. Overall, 56% of those not attending are women, as compared to 54% of those in attendance, indicating that a larger proportion of women than men have not returned.

About the same difference in percent of the sexes are represented in Vocational and Non-Vocational areas. Fewer women

than expected are in the vocational curriculum. The reasons for these differences are not evident. It is possible that more women attend for short-term General Interest reasons than men. It is also possible that there are less vocational courses offered in female-dominated occupations, e.g., nursing, secretarial science, than male-dominated, e.g., automechanics, computer science, welding. Still less women vocational students are in attendance. This may be because more women than men take "brush-up" courses in areas like typing, or take license-renewal courses in areas like nursing or cosmetology. Obtaining evidence for these questions will involve a detailed analysis of students who attended only one or two semesters.

In summary, those students who are in attendance during the third semester of the study are younger, tend to be unmarried, and have fewer dependents than Attendees. By implication, the younger students stay at a community college for a longer time, possibly because their need for education and training is greater, or at least because it takes longer for education to create change in their lives. It will be seen below that this age difference has an effect on primarily job-related variables.

Table 1

Variable 161A

AGE

	VOCATIONAL**			NON-VOCATIONAL**			TOTALS**		
Valid Cases	1,119	1,132	2,350	1,257	1,606	3,006	2,510	2,786	5,866
Sample Size	1,121	1,135	2,355	1,259	1,618	3,020	2,514	2,802	5,892
	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %
15 to 19	46	25	35	43	23	32	45	24	33
20 to 24	26	28	27	27	31	29	27	30	28
25 to 29	9	13	11	10	15	13	9	14	12
30 to 34	6	11	9	6	10	9	6	11	9
35 to 39	4	8	6	4	7	5	4	7	6
40 to 44	5	5	5	3	4	4	4	5	4
45 to 49	2	5	4	2	3	3	2	4	3
50 to 54	2	3	2	2	2	2	2	2	2
55 to 59	1	3	2	1	2	1	1	2	2
60 to 64	1	1	1	1	1	1	1	1	1
65 to highest	0	0	0	1	2	2	1	1	1
Missing	(0)	(0)	(0)	(0)	(1)	(0)	(0)	(1)	(1)
Mean *	24.4	28.4	26.4	24.7	27.9	26.1	24.6	28.1	26.7
Median*	19.8	24.1	21.0	19.9	23.3	21.4	19.9	23.2	21.3
Mode*	19.0	19.0	19.0	19.0	19.0	19.0	19.0	22.0	19.0

*Calculated on ungrouped data
**Individual categories will not sum to totals. See explanation page 12.

Variable 162

Table 2

SEX

	VOCATIONAL *			NON-VOCATIONAL *			TOTALS *		
Valid Cases	1,121	1,135	2,355	1,259	1,618	3,020	2,514	2,802	5,892
Sample Size	1,121	1,135	2,355	1,259	1,618	3,020	2,514	2,802	5,892
	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %
Male	49	46	47	44	40	41	46	42	44
Female	51	54	53	56	60	58	54	58	56

Table 3

MARITAL STATUS

	VOCATIONAL *			NON-VOCATIONAL *			TOTALS *		
Valid Cases	886	553	1,495	913	751	1,745	1,928	1,319	3,529
Sample Size	1,121	1,135	2,355	1,259	1,618	3,020	2,514	2,802	5,892
	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %
Never Married	73	48	63	72	51	61	73	50	62
Married	22	42	31	23	42	33	22	42	32
Separated	1	1	1	1	1	1	1	1	1
Divorced	4	7	5	3	5	4	4	6	5
Widowed	1	1	1	1	1	1	1	1	1
Missing	(21)	(51)	(37)	(28)	(54)	(42)	(23)	(53)	(40)

*See footnote Table 1.
* * Higher precentages of Non-Attendee missing data result from difficulties in locating these students.

Table 4

Variable 201

NUMBER OF DEPENDENTS

	VOCATIONAL**			NON-VOCATIONAL**			TOTALS**		
Valid Cases	883	553	1,491	906	746	1,733	1,918	1,314	3,512
Sample Size	1,121	1,135	2,355	1,259	1,618	3,020	2,514	2,802	5,902
	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %
0	84	64	76	83	71	77	84	68	77
1	8	13	9	7	11	9	7	12	9
2	5	11	7	4	9	7	4	10	7
3	3	7	4	3	5	4	3	6	4
4	1	4	2	2	2	2	2	3	2
5	0	1	0	0	1	1	0	1	1
6	0	1	0	0	1	1	0	0	0
7	0	0	0	0	0	0	0	0	0
8+	0	0	0	0	0	0	0	0	0
Missing	(19)	(51)	(37)	(28)	(54)	(43)	(24)	(53)	(41)
Mean*	0.32	0.81	0.52	0.38	0.60	0.50	0.34	0.69	0.50
Median*	0.10	0.28	0.16	0.10	0.20	0.15	0.10	0.23	0.15
Mode*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

*Calculated on ungrouped data.
**Individual categories will not sum to totals. See explanation page 12.

Work Variables

This section contains descriptions and comparisons between student groups on variables relating to their jobs. These variables include JOB TYPE, JOB CHANGE?, HOURS WORKED, HOURLY PAY, PAY CHANGE?, COURSES HELP CAREER?, and HOW HELPED CAREER?. Tables 5 - 11 (pp. 23 - 28) contain these data.

There are differences both between Vocational and Non-Vocational and between Attendees and Non-Attendees. Vocational Students hold significantly more skilled jobs and less are homemakers than Non-vocational students. This may be accounted for by the number of Job Upgraders in the Vocational category and by the fact that Homemakers may be attending more for General Education or cultural reasons than for skill-type courses.

Non-Attendees have higher-level jobs than Attendees. Only 7% of Non-Attendees are unskilled, compared with 14% of Attendees; 27% of Non-Attendees have skilled jobs, compared with 18% for Attendees. A like situation occurs for professional/supervisory jobs (9% compared with 4%). This discrepancy between Attendees and Non-Attendees is probably related to AGE and the number of Job Upgraders and License Maintainers among Non-Attendees. "Student Not Usually Employed" provides additional explanation since more Attendees than Non-Attendees are in this category.

Table 6 gives data and comparisons for the variable JOB CHANGE?. In general, a larger proportion of Vocational than Non-vocational students report job improvement (33% to 29%) and fewer Homemakers (5% to 9%). Only a more detailed examination of the data would permit an explanation of this. It is possible

that this accounts for younger students changing from menial jobs to those in their occupational area of choice; it is also possible that it accounts for the effect of vocational education upon the jobs of Job Upgraders.

The major discrepancy between Attendees and Non-Attendees is that more Attendees are not working (23% to 17%) and fewer are homemakers (6% to 9%). These data are related to the variable, AGE. Attendees are younger and more likely to be receiving parental help, while Non-Attendees are older and more likely self-supporting.

Table 7 contains descriptions and comparisons of the groups on HOURS WORKED. As expected, those not in attendance work significantly more hours than those attending (37.1 to 28.8 hours per week).

Table 8, WAGES - HOURLY PAY indicates that Non-Attendees earn significantly more money than Attendees ($6.36 compared with $5.00). Surprisingly, there is little difference between the hourly wages of Vocational and Non-Vocational students. (Note that Unemployed and Homemaker are excluded from the calculations; only those with paying jobs were used in calculating means, medians and modes).

Table 9 shows PAY CHANGE?, whether the student's pay had lowered, remained the same or increased since Spring, 1979. Pay change increase was restricted to those who had received raises of 10% or more to exclude cost-of-living increases. Among Vocational students, a higher precentage of Non-Attendees (53%) reported an increase, compared with Attendees (44%). The variable AGE is probably related to the differences between Attendees and Non-Attendees in each category.

Regardless of age, both Non-Attendee Vocational and Non-Attendee Non-Vocational students improved their jobs more than Attendees. This phenomenon could be related to two major reasons for non-attendance, i.e., Job Conflict and Job Preference over School. It may be that many former students picked up enough job skills to "price themselves out of the college market." Said another way, they either changed jobs or got promotions that were fulfilling enough for them to leave school, at least temporarily. An alternate explanation is that Non-Attendees "got what they came for" and that the skills they learned helped them get raises. Some of these explanations are being investigated during the data collection for Spring, 1980.

Table 10 describes and compares the students on the responses to the question "Will the Courses You Have Taken Help Your Career?" The summary of the tables indicates that Vocational students consider their courses will be of much greater help than the Non-Vocational. The table also indicates that those in attendance see their courses of much greater help than those no longer in attendance.

Table 11 describes the reaction to the question "How Will Your Courses Help Your Career?" Vocational students saw the courses as TRAINING A MAJOR JOB SKILL more than the Non-Vocational (37% to 24%). Overall, the Attendees saw the courses as TRAINING for A MAJOR JOB SKILL and TRAINING COMPLETELY FOR JOB significantly more than the Non-Attendees.

In summary Vocational students have better jobs, improve their jobs more, and see the courses they have taken as helping

them more in their career than Non-Vocational students. Students in attendance have lower-skilled jobs and are paid less than those who are not in attendance. However, Attendees see more value in the courses helping their career and training them than do the Non-Attendees. Many of the differences between Attendees and Non-Attendees are related to, and partially explained by, the differences in AGE (see page 16).

Variable 202

Table 5

JOB TYPE

	VOCATIONAL * *			NON-VOCATIONAL * *			TOTALS * *		
Valid Cases	868	539	1,462	876	762	1,665	1,866	1,264	3,398
Sample Size	1,121	1,135	2,355	1,259	1,618	3,020	2,514	2,802	5,892
	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %
Unskilled	12	6	10	14	8	11	14	7	11
Semi-Skilled	38	31	35	37	30	33	37	31	34
Skilled	21	31	25	14	23	18	18	27	22
Professional/ Supervisory	3	11	6	4	7	6	4	9	6
Unemp. Student	20	6	14	18	7	13	18	7	13
Other	1	1	1	2	2	2	2	2	2
Homemaker	4	6	4	7	12	9	6	9	7
Commercial	1	2	1	2	4	2	1	3	2
Unemployed Non-Student	1	7	4	2	7	5	1	7	4
Missing	(23)	(53)	(38)	(30)	(56)	(45)	(26)	(55)	(42)

* * Individual categories will not sum to totals (see p. 12).

Variable 203

Table 6

JOB CHANGE

	VOCATIONAL**			NON-VOCATIONAL**			TOTALS**		
Valid Cases	794	483	1,331	813	673	1,560	1,722	1,115	3.141
Sample Size	1,121	1,135	2,355	1,259	1,618	3,020	2,514	2,802	5,892
	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %
Job Worse	2	1	2	1	2	2	2	2	2
Job Same	40	43	41	40	40	40	39	41	40
Job Better	31	35	33	28	29	29	31	32	31
Not Working	22	15	19	23	18	21	23	17	20
Homemaker	4	6	5	7	12	9	6	9	7
Not Applicable	(5)	(3)	(4)	(3)	(2)	(2)	(4)	(2)	(3)
Missing	(24)	(55)	(40)	(32)	(57)	(46)	(27)	(56)	(44)

24

** Individual categories will not sum to totals (see explanation p. 12).

Table 7

Variable 204A

HOURS WORKED

	VOCATIONAL**			NON-VOCATIONAL**			TOTALS**		
Valid Cases	639	422	1,101	612	495	1,156	1,345	928	2,471
Sample Size	1,121	1,135	2,355	1,259	1,618	3,020	2,514	2,802	5,892
	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %
1 to 5	2	1	1	1	1	1	1	1	1
6 to 10	6	1	4	7	2	5	6	2	4
11 to 15	8	1	5	7	2	5	7	2	5
16 to 20	18	5	12	20	6	13	19	5	12
21 to 25	9	4	7	12	4	8	10	4	8
26 to 30	11	7	9	10	6	8	10	6	8
31 to 35	4	3	4	5	6	5	5	5	4
36 to 40	37	64	49	33	60	46	35	62	48
41 to 45	2	4	3	3	4	4	3	4	3
46 to 50	2	6	3	2	7	4	2	6	4
51 to 60	1	5	3	1	2	1	1	3	2
Unemployed	(17)	(7)	(12)	(17)	(8)	(11)	(17)	(7)	(11)
Homemaker	(3)	(3)	(3)	(4)	(5)	(5)	(4)	(4)	(4)
Missing	(23)	(54)	(39)	(31)	(57)	(45)	(26)	(56)	(43)
Mean*	28.5	37.9	32.6	28.3	36.4	32.0	28.8	37.1	31.4
Median*	29.8	39.9	39.6	29.5	39.9	39.5	29.8	39.9	36.2
Mode*	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0

*Calculated on ungrouped data.

**Individual categories will not sum to totals (see p. 12).

Variable 205A

Table 8

WAGES - HOURLY PAY

	VOCATIONAL**			NON-VOCATIONAL**			TOTALS**		
Valid Cases	586	359	983	556	415	1,006	1,226	782	2,168
Sample Size	1,121	1,135	2,355	1,259	1,618	3,020	2,514	2,802	5,892
	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %
1.50 - 2.49	0	0	0	1	0	0	1	0	0
2.50 - 3.49	27	10	20	27	13	21	27	12	21
3.50 - 4.49	28	19	25	33	26	29	30	22	27
4.50 - 5.49	15	18	16	15	15	15	16	17	16
5.50 - 6.49	9	15	11	8	13	10	9	14	10
6.50 - 8.49	10	16	12	8	16	12	9	16	13
8.50 - 10.49	6	10	9	5	8	7	5	9	7
10.50 - 17.49	5	12	7	3	9	6	4	10	6
17.50 - 40.00	0	1	1	1	1	1	1	1	1
Unemployed	(16)	(7)	(11)	(17)	(8)	(11)	(16)	(7)	(11)
Homemaker	(3)	(3)	(3)	(5)	(5)	(5)	(4)	(4)	(4)
Missing	(29)	(59)	(45)	(35)	(62)	(50)	(32)	(61)	(48)
Mean*	4.9	6.5	5.5	4.8	5.5	5.5	4.9	6.3	5.5
Median*	4.0	5.5	4.5	4.0	4.4	4.4	4.0	5.2	4.5
Mode*	3.5	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0

*Calculated on ungrouped data.

** See footnote p. 25.

Table 9

Variable 206

PAY CHANGE

	VOCATIONAL**			NON-VOCATIONAL**			TOTALS**		
Valid Cases	774	450	1,272	757	576	1,395	1,647	1,037	2,907
Sample Cases	1,121	1,135	2,355	1,259	1,618	3,020	2,514	2,802	5,892
	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %
Unemployed	24	16	21	26	21	23	25	19	22
Less	5	4	4	5	6	5	5	5	5
Same	27	26	27	27	21	24	26	23	25
More	44	53	48	43	52	47	44	53	48
Homemaker	(3)	(4)	(4)	(6)	(5)	(6)	(4)	(6)	(5)
Missing	(28)	(57)	(43)	(34)	(59)	(48)	(30)	(5)	(46)

Table 10

Variable 207

WILL COURSES HELP CAREER?

	VOCATIONAL**			NON-VOCATIONAL**			TOTALS**		
Valid Cases	847	530	1,433	855	756	1,690	1,826	1,298	3,398
Sample Size	1,121	1,135	2,355	1,259	1,618	3,020	2,514	2,802	5,892
	ATT.	N-ATT.	TOTAL	ATT.	N-ATT.	TOTAL	ATT.	N-ATT.	TOTAL
Not Related	23	31	27	43	66	53	33	51	41
Slightly	7	11	8	8	6	7	7	8	7
Somewhat	20	21	21	17	11	14	19	15	17
Great Deal	50	37	44	32	17	25	42	25	35
Missing	(22)	(53)	(39)	(32)	(53)	(44)	(27)	(54)	(42)

** See footnote p. 25.

Variable 208

Table 11

IF JOB HELPED CAREER, HOW?

	VOCATIONAL**			NON-VOCATIONAL**			TOTALS**		
Valid Cases	645	357	1,035	469	259	764	1,211	620	1,994
Sample Size	1,121	1,135	2,355	1,259	1,618	3,020	2,514	2,802	5,982
	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %
Skill in Jobs	23	35	27	29	29	29	25	33	27
Major Job Skill	37	36	37	26	19	24	33	29	32
Train Completely	12	5	10	11	7	9	12	6	9
Helpful Overall	12	13	13	15	18	16	13	15	14
Education Generally Helpful	16	11	14	20	27	22	18	18	18
Missing	(24)	(53)	(39)	(33)	(54)	(45)	(28)	(54)	(42)
Not Applicable	(18)	(15)	(17)	(30)	(30)	(30)	(24)	(24)	(23)

** See footnote p. 25.

Course and Unit Variables

Course and Unit variables include VOCATIONAL or NON-VOCATIONAL, TOTAL COURSES SIGNED UP FOR, TOTAL COURSES PASSED, UNITS ATTEMPTED, UNITS PASSED, GRADE POINT AVERAGE (G.P.A.).

Table 12 Gives the breakdown of Vocational and Non-Vocational students as defined by SAM (Gold, 1978) and modified as discussed above. Category 3 students are characterized as Non-Vocational. Overall, 44% of the students in the sample were Vocational, 56% Non-Vocational. Among Attendees, the proportions were 47% and 53% respectively, and among Non-Attendees, 42% and 58% respectively.

Table 12

	ATTENDEES %	NON-ATTENDEES %	TOTAL STUDENTS %
Vocational	47	42	44
Non-Vocational	53	58	56

Table 11 shows that the Non-Attending students favor Non-Vocational courses more than Attending students. This difference would be greater if it were possible to remove from the Non-Attendee Vocational cell those students who took vocational courses for General Interest reasons; e.g., those taking auto repair or ornamental horticulture for home maintenance reasons. Comparing Vocational Attendees with Vocational Non-Attendees, the former appear to have longer-term objectives.

There appear to be few differences between Vocational and Non-Vocational students with respect to COURSES SIGNED UP FOR since Fall, 1978, but a great difference in COURSES PASSED. The mean number of COURSES PASSED by the former (4.6) is greater than by the latter (3.7). Among Attendees, the means are 6.9

for Vocational students and 6.0 for Non-Vocational students. Among Non-Attendees, the means are 2.3 and 1.9 respectively. The mean UNITS ATTEMPTED (Units for which a grade of A-F was received, Table 15) was higher for Vocational students than Non-Vocational students (12.4 and 10.0, respectively). Among Attendees, they were 18.6 and 15.8 respectively, and among Non-Attendees 6.5 and 4.9 respectively.

The record on UNITS PASSED is similar (Table 16). Vocational student UNITS PASSED mean was 12.2 compared with 9.6 for Non-Vocational students. Among Attendees, the means were 18.7 and 15.6 respectively; among Non-Attendees 6.4 and 4.6 respectively. There were no noteworthy differences in G.P.A. between any groups, all falling between 2.6 and 2.7 (Table 17).

In summary, the Vocational students appear to be more productive with respect to unit load carried, and passing courses and units.

Table 13

Variable 177

TOTAL COURSES SIGNED UP FOR

	VOCATIONAL**			NON-VOCATIONAL**			TOTALS**		
Valid Cases	1,044	1,073	2,213	1,129	1,492	2,760	2,307	2,613	5,472
Sample Size	1,121	1,135	2,355	1,259	1,618	3,020	2,514	2,802	5,892

	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %
0	0	0	0	0	1	1	0	0	1
1	2	24	14	6	30	20	4	28	17
2	6	18	13	9	19	15	8	18	14
3	7	12	10	6	10	8	7	11	9
4	6	10	8	6	7	7	6	9	8
5	5	8	6	5	6	6	5	7	6
6	5	5	5	5	5	5	5	5	5
7	6	4	5	4	4	4	5	4	5
8	8	4	6	5	3	4	6	3	5
9	6	2	4	7	4	5	6	3	5
10	9	2	5	8	3	5	9	3	5
11	9	3	6	8	2	5	9	3	5
12	6	2	4	6	1	3	6	2	4
13	5	2	4	7	1	3	6	2	3
14	5	1	3	4	1	2	4	1	2
15	4	1	2	4	1	2	3	1	2
16	2	1	2	2	0	1	2	1	1
17+	7	2	5	9	2	5	8	2	5
Missing	(7)	(6)	(6)	(10)	(8)	(9)	(8)	(7)	(7)
Mean*	9.3	4.6	6.8	9.1	4.3	6.2	9.1	4.4	6.4
Median*	9.2	3.2	5.4	9.1	2.5	4.4	9.0	2.8	4.8
Mode*	11.0	1.0	1.0	2.0	4.1	1.0	11.0	1.0	1.0

* Calculated on ungrouped data. ** Individual categories will not sum to totals see p.12.

Table 14

Variable 178

TOTAL COURSES PASSED

	VOCATIONAL* *			NON-VOCATIONAL* *			TOTALS* *		
Valid Cases	1,119	1,130	2,345	1,259	1,603	2,996	2,504	2,781	5,843
Sample Size	1,121	1,135	2,355	1,259	1,618	3,020	2,514	2,802	5,892
	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %
0	4	32	18	9	37	25	7	35	22
1	5	24	15	11	27	20	8	26	17
2	10	13	12	10	12	11	10	12	11
3	8	8	8	7	6	6	8	7	7
4	6	6	6	5	4	5	5	5	5
5	8	4	6	6	3	4	7	3	5
6	7	3	5	7	2	4	7	2	4
7	8	3	5	6	3	4	7	3	4
8	8	2	5	8	2	4	8	2	4
9	7	2	4	7	1	3	7	1	4
10	7	2	5	7	1	4	7	2	4
11	6	1	4	6	1	3	6	1	3
12	5	1	3	5	1	2	5	1	3
13	4	0	2	3	0	1	3	0	2
14	2	0	1	2	0	1	2	0	1
15	2	0	1	1	0	1	1	0	1
16	1	0	1	1	0	1	1	0	1
17+	1	0	1	2	1	0	1	0	1
Missing*	(0)	(0)	(0)	(1)	(1)	(1)	(0)	(1)	(1)
Mean*	6.9	2.4	4.6	6.2	2.1	3.8	6.4	2.2	4.1
Median*	6.7	1.3	3.2	5.9	1.0	2.0	6.2	1.1	2.4
Mode*	2.0	0.0	0.0	1.0	0.0	0.0	2.0	0.0	0.0

* —** See footnotes p. 31

Variable 175A

Table 15

UNITS ATTEMPTED (A - F)

	VOCATIONAL* *			NON-VOCATIONAL* *			TOTALS* *		
Valid Cases	1,112	1,115	2,326	1,239	1,556	2,937	2,479	2,712	5,686
Sample Size	1,121	1,135	2,355	1,259	1,618	3,020	2,514	2,802	5,892
	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %
0	4	30	18	9	37	25	7	34	21
1 - 2	2	8	5	6	12	10	4	10	8
3 - 5	7	22	14	11	20	16	9	21	15
6 - 8	10	12	11	9	10	10	10	11	11
9 - 11	7	7	7	6	5	5	7	5	6
12 - 14	10	6	8	7	4	6	8	5	7
15 - 17	7	4	5	7	3	5	7	3	5
18 - 20	9	3	6	6	2	4	8	2	5
21 - 25	17	4	11	15	3	8	16	3	9
26 - 30	15	2	8	13	2	7	14	2	8
31 - 40	11	2	7	8	1	4	9	2	5
40+	2	1	1	2	1	2	2	1	1
No Graded Classes	(1)	(1)	(1)	(1)	(3)	(2)	(1)	(3)	(3)
Missing	(0)	(1)	(0)	(1)	(1)	(1)	(0)	(1)	(1)
Mean*	18.5	6.9	12.5	15.9	5.6	10.0	17.0	6.1	11.1
Median*	18.9	3.3	9.2	15.2	2.6	5.5	17.0	2.9	6.5
Mode*	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

*Calculated on the basis of ungrouped data.

* * See footnote p. 31.

Variable 174A

Table 16

UNITS PASSED

	VOCATIONAL * *			NON-VOCATIONAL * *			TOTALS * *		
Valid Cases	1,120	1,129	2,347	1,252	1,608	3,020	2,506	2,785	5,852
Sample Size	1,121	1,135	2,355	1,259	1,618	3,020	2,514	2,802	5,892
	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %
0	5	32	19	9	38	26	7	36	23
1 - 2	2	9	5	6	14	11	4	12	8
3 - 5	7	20	14	11	19	16	9	20	15
6 - 8	10	12	11	9	9	9	10	10	10
9 - 11	7	7	7	6	5	5	6	5	6
12 - 14	9	5	7	7	3	5	8	4	6
15 - 17	8	4	6	7	3	5	7	3	5
18 - 20	7	2	5	7	2	4	7	2	4
21 - 25	17	4	11	14	2	8	16	3	9
26 - 30	15	2	9	14	2	7	14	2	8
31 - 40	12	2	7	9	2	4	10	1	5
40+	2	1	2	2	1	1	2	1	1
Missing	(0)	(1)	(0)	(1)	(1)	(1)	(0)	(1)	(1)
Mean*	18.6	6.7	12.5	16.0	5.3	9.8	17.0	5.8	10.8
Median*	19.0	3.2	9.0	15.5	2.2	4.8	16.9	2.7	6.2
Mode*	6.0	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0

*Calculated on the basis of ungrouped data.

* *See footnote p. 31.

Table 17

GRADE POINT AVERAGE (G.P.A.)

	VOCATIONAL**			NON-VOCATIONAL**			TOTALS**		
Valid Cases	1,054	775	1,900	1,105	965	2,172	2,281	1,763	4,443
Sample Size	1,121	1,135	2,355	1,259	1,618	3,020	2,514	2,802	5,892
	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %
Less than 1.0	2	5	5	3	9	7	3	8	6
1.0 - 1.5	6	6	8	7	7	6	6	7	8
1.6 - 2.0	16	19	16	16	17	17	16	18	17
2.1 - 2.5	14	8	11	15	7	11	14	7	11
2.6 - 3.0	31	33	31	28	29	28	30	31	29
3.1 - 3.5	14	7	11	13	7	10	13	7	10
3.6 - 4.0	17	22	19	19	24	21	18	23	20
No G.P.A.	(6)	(32)	(19)	(12)	(40)	(28)	(9)	(37)	(25)
Mean*	2.7	2.6	2.6	2.7	2.6	2.6	2.7	2.6	2.6
Median*	2.7	2.9	2.7	2.7	2.7	2.8	2.7	2.8	2.7
Mode*	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0

*Calculated on ungrouped data

** See footnote p. 31.

Attendee Academics

Attendee Academics include REASONS FOR ATTENDANCE, PLAN TO ATTEND FOUR-YEAR SCHOOL?, GOAL CLARITY, HOW MUCH HELP FROM COURSES?, WHAT OBSTACLES MIGHT EXIST?, SAM MAJOR, and MAJOR CHANGE? The questions were asked of only those who were in attendance in Fall, 1979.

The data in Table 18 show that 30% of respondents want to transfer to a four-year college, and 36% are attending for job-related reasons. General Interest accounts for 20%, an A.A. degree only 6%, and home or hobby skills 2%.

Twenty-four percent were preparing for their first-career job, 9% want to upgrade job skills for a current job, and 4% were preparing for a second career or an after-hours job.

Among Vocational students, 25% said that they plan to transfer to a four-year college. This provides the rationale for the Transfer Technical Major Student, those who take vocational courses with transfer credit and have expressed a desire to transfer to a four-year college. Thirty percent are preparing for a first-career job (Career Program Completer Students or Job-Seeker Students), 11% wanted to improve their present job (Improving Skills Students), and 5% wanted to prepare for a second career or to obtain an after-hours job (Second Careerist Students).

Among Non-Vocational students, 35% said they wanted to transfer to a four-year college. Twenty-four percent were attending for General Interest reasons. Surprisingly, 28% listed job-related reasons for attendance (18% Prepare for Job, 7% Improve Present Job, 3% Prepare for Another Career).

Interpretation of these data can only be speculative at this

time. Possibly the SAM criteria used to define Vocational students mis-classified some of the respondents; i.e., some careers don't require courses defined as Vocational. Possibly some of the Class 3 (Possibly an Occupational Major) students want to fill in some of their academic deficits before taking more advanced vocational courses; others in Class 3 may want minimal job skills to improve earning capacity while in college.

When asked directly DO YOU PLAN TO ATTEND A 4-YEAR COLLEGE?, 53% of all students said yes (Table 19); 60% of Non-Vocational and 46% of Vocational Students made this response. These percentages are higher than in the previous table, probably because they represent long-term aspirations.

GOAL CLARITY (Table 20) was the result of an interpretation by the interviewers. Overall, 51% of respondents were judged to have articulated specific goals (I want to be a nurse; I want to be an auto mechanic). Thirty-seven percent had a general idea (I am interested in computers), and 12% had no clear idea. There were no noteworthy differences between Vocational and Non-Vocational Students.

Given the modal age at entry (18 in Fall, 1978), this finding is not surprising, though it runs counter to the general assumption that Vocational Students are more sure of their career goals than Non-Vocational Students. This finding points out the need for more and better career counseling on community college campuses in California.

When asked how much help toward their goals they had received from their courses (Table 21), 19-20% of students said they had received Excellent help, 40-46% Good help, 20-25% with Satisfactory

help, 11-13% with Insufficient and 2-3% with None. Experience with response set on rating scales in the SLS indicates that these results may not be entirely reliable. With almost all 5-point scales, the response in each category has been approximately the same. It is not possible to state whether students really feel this way about the job the colleges do for them, or whether the responses are influenced by some social norm.

The data in Table 22 show that fewer Vocational than Non-Vocational Students expect serious obstacles to achieving their goals (36% to 45%). Ten percent of Vocational Students expected Finances to be a problem, compared with 16% of Non-Vocational; 11-12% of each group expected Job Conflict to prove a problem.

Business and Management (Table 23) was the most popular SAM major among Vocational Students (33%), followed by Engineering and Related Sciences (15%). Other than "General Transfer" (38%), Business and Management was also the most popular among Non-Vocational Students (13%).

Table 24 shows that a higher percentage of Vocational than Non-Vocational Students maintained the same major. Fifty-five percent of Vocational Students did not change major, compared with 43% of Non-Vocational Students. This indicates that Vocational Students tend to be more stable in their decisions than Non-Vocational Students.

Table 18

ATTENDEES*

REASONS FOR ATTENDANCE

Valid Cases	1,410	1,390	3,041
	VOC.** %	NON-VOC.** %	TOTAL** %
Transfer to four-year college	25	35	30
Prepare for a job	29	18	23
Personal enjoyment	9	12	10
Personal exploration	7	12	10
Improve present job	11	7	9
A.A. degree only	8	5	6
Prepare for new job	5	3	4
Skill - home or hobby	2	3	2
Didn't know what else to do	1	1	1
Take extra courses while attending four-year college	0	1	1
To kill time	1	1	1
Habit going to school	1	1	1
Get Financial Aid	0	1	0
Please someone else	0	0	1
Couldn't get a job	0	0	0

*Questions asked of Attendees only.

**Individual categories will not sum to totals (see explanation p. 12).

Table 19

ATTENDEES*

Variable 189

PLAN TO ATTEND 4-YEAR SCHOOL?

Valid Cases	843	846	1,841
Sample Size	1,121	1,259	2,514
	VOC.** %	NON-VOC.** %	TOTAL** %
Yes	46	60	53
No	35	26	31
Undecided	19	14	16
Presently attending	0	0	0
Missing	(25)	(33)	(28)

Table 20

Variable 190

ATTENDEES*

GOAL CLARITY

Valid Cases	828	810	1,793
Sample Size	1,121	1,259	2,514
	VOC.** %	NON-VOC.** %	TOTAL** %
No clear idea	10	14	12
General idea	36	35	37
Specific Goal	54	51	51
Missing	(26)	(36)	(30)

Variable 191

Table 21

ATTENDEES*

HOW MUCH HELP FROM COURSES?

	VOC**	NON-VOC**	TOTAL**
Valid Cases	856	840	1,837
Sample Size	1,121	1,259	2,514
	%	%	%
No Progress	2	3	3
Some, Not Enough	11	13	13
Satisfactory	20	25	22
Good	46	40	43
Excellent	20	19	19
Missing	(24)	(34)	(28)

*Questions asked of Attendees only.

**See footnote p. 39.

Variable 192

Table 22

ATTENDEES*

WHAT OBSTACLES MIGHT EXIST?

	VOC**	NON-VOC**	TOTAL**
Valid Cases	859	837	1,839
Sample Size	1,121	1,259	2,514
	%	%	%
Finances	10	16	14
Reading/Math Problems	1	2	2
Job Conflict	11	12	12
Transportation	4	2	3
Other	11	13	12
Nothing	63	55	58
Missing	(24)	(34)	(28)

Table 23

Variable 180

ATTENDEES*

SAM MAJOR

	1,101	1,229	2,449
Valid Cases			
Sample Size	1,121	1,259	2,514
	VOC.** %	NON-VOC.** %	TOTAL ** %
Agriculture	3	1	2
Architecture	3	1	2
Business & Management	33	13	22
Communication	2	1	1
Computer & Info. Science	5	2	3
Education	3	0	1
Engineering	15	4	9
Art	5	2	3
Health	8	2	5
Home Economics	3	2	2
Public Affairs	5	2	3
Social Science	0	1	1
Community Services	2	0	1
Apprenticeship	2	1	1
General Transfer	5	38	23
Self-Enrichment	1	12	7
Undecided	6	18	12
Missing	(3)	(4)	(3)

*Questions asked of Attendees only.

** See footnote p. 39.

Table 24

Variable 188

ATTENDEES*

MAJOR CHANGE

	863	876	1,887
Valid Cases			
Sample Size	1,121	1,259	2,514
	VOC.**	NON-VOC.**	TOTAL
Same as Fall 1978	55	46	52
Agriculture & Nat. Res.	2	0	1
Architecture & Envir.	1	1	1
Biological Sciences	0	1	1
Business & Management	13	9	10
Communication	1	1	1
Computer & Science Info.	2	1	1
Education	2	2	2
Engineering & Related Sci.	5	2	3
Fine & Applied Arts	2	1	1
Health Service	1	3	2
Home Economics	1	1	1
Letters	0	1	0
Physical Sciences	0	1	0
Psychology	0	1	1
Public Affairs & Service	1	1	1
Social Sciences	1	1	1
Community Services	1	0	1
Interdisciplinary Studies	0	1	0
Apprenticeship	1	1	1
General Transfer	7	14	10
Self-Enrichment	1	5	3
Undecided	3	9	6
Missing	(23)	(31)	(26)

Non-Attendee Record and Planning Variables

This section will include information on HOW WELL GOALS WERE MET, REASONS FOR NOT RETURNING, PLAN TO TAKE MORE COURSES?, and CURRENT PLACEMENT. The data were collected only from those not attending in Fall, 1979.

The data in Table 25 show that a greater precentage of Vocational Students (42%) than Non-Vocational (34%) felt that they had met their goals completely. An equal percent (39-41%) of the two groups felt they had met their goals somewhat, and a greater percent of Non-Vocational than Vocational Students (19-24%) felt they had not met their goals at all.

Further analysis will make it possible to examine response variation by age group. Non-Attendees tend to be older than Attendees; it would be useful to find out whether one age group dominates the dissatisfied group.

Vocational and Non-Vocational Students (Table 26) differed in their REASONS FOR NOT RETURNING. Twenty percent of Non-Vocational Students said they had left because they preferred working to continuing education, compared with 14% of Vocational Students. Twenty-eight percent of Vocational Students listed Conflict with Job as a reason, compared with 14% of Non-Vocational Students. More Vocational Students than Non-Vocational listed "Objectives Met" (10%to 6%). A larger portion of Non-Vocational Students (6%) were judged Indefinitely Motivated than Vocational (5%). Thirteen percent of Non-Vocational Students reported that they had transferred, compared with 8% of Vocational Students. Each of the remaining 15 reasons represented less than 5% of responses.

When asked ARE YOU PLANNING TO TAKE MORE COURSES AT THIS

COLLEGE?, about 50% of each group (Table 27) said they probably would do so. Unfortunately, there is no way at present of finding out what proportion of these will carry out their intention to return.

Table 28 shows that a higher percentage of Vocational (66%) than Non-Vocational Non-Attendees (52%) now hold jobs. Twelve percent of Non-Vocational Students are in four-year colleges, compared with 16% of Vocational Students. Eight percent of Non-Vocational Students were in other community colleges; 5% of Vocational Students were Lateral Transfers. Thirteen percent of Non-Vocational Students and 9% of Vocational Students reported no change in their status. These are probably General Interest students past the age of initial education of job training.

Discussion

Vocational Students report more complete goal attainment than Non-Vocational students, a finding which may reflect more on the specificity of goal selection of the members of the two groups than on any difference in instruction. It is easier to formulate goals and carry out plans for career/job-oriented skill education than for the more general education engaged in by Non-Vocational students. In all probability, Vocational Students and instructors are very close together in their understanding of the goals of instruction. In liberal arts education, it is open to question whether the student understands the important outcomes of instruction, or whether the instructors could explain them to their students.

Perhaps echoing the finding above, a larger proportion of Non-Vocational Students than Vocational Students said they had

left college because they preferred working to continuing their education. This represents a value judgment on the part of the students, and may be a result of the extent to which they do or do not understand the goals of the educational process. A greater percentage of Vocational Students than Non-Vocational listed Job Conflict as a reason for withdrawal. This, too, may be a value judgment on the part of students, one which involves interest in a career on the part of Vocational Students and career-seeking by Non-Vocational Students who would rather work than attend school.

Table 25

Variable 197

NON-ATTENDEES*

HOW WELL GOALS MET?

Valid Cases	577	777	1,244
Sample Size	1,135	1,618	2,802
	VOC:** %	NON-VOC:** %	TOTAL** %
Not at all	19	24	23
Somewhat	39	41	40
Completely	42	34	38
Missing	(53)	(56)	(32)

*Questions asked only of Non-Attendees

**See footnote p. 39.

Table 26

NON-ATTENDEES*

REASONS FOR NOT RETURNING

Valid Cases	701 VOC:** %	923 NON-VOC:** %	1,851 TOTAL** %
Job preference	15	20	18
Job conflict	28	14	20
Transferred	8	13	11
Personal conflict	7	8	8
Met objective	10	6	8
Moved	6	6	7
Indefinite motivation	5	6	5
Illness	5	5	5
Disliked class	3	3	3
Transportation	3	3	3
Displaced homemaker	2	3	2
Lack of child care	1	2	2
Conflict other college	1	2	2
Financial problems	2	3	3
Graduated	2	0	1
Disliked instructor	1	2	2
Underprepared	2	1	2
Disliked instruction	0	1	1
Assignments too heavy	1	0	0
LES - NES	0	0	0
Physical handicap	0	0	0
Ethnic problems	0	0	0

Table 27

Variable 199

NON-ATTENDEES*

PLAN TO TAKE MORE COURSES?

Valid Cases	591	803	1,285
Sample Size	1,135	1,668	2,802

	VOC.**	NON-VOC.**	TOTAL**
	%	%	%
Yes	50	49	49
No	19	19	18
Maybe	31	32	32
Missing	(52)	(55)	(54)

*Questions asked of Non-Attendees only.

**See footnote p. 39.

Table 28

Variable 196

NON-ATTENDEES*

CURRENT PLACEMENT

Valid Cases	591	823	1,538
Sample Size	1,135	1,618	2,802

	VOC.**	NON-VOC.**	TOTAL**
	%	%	%
Job	66	52	59
U.C.	2	2	2
C.S.	2	6	5
Private California College	1	2	2
Out of state college	2	2	2
Other community college	5	8	7
Other	12	16	14
No change	9	13	12
Missing	(52)	(54)	(54)

Chapter 3

Special Student Groups

There are seven special groups identified in the study. These are:

1. Ethnic Minorities
2. Financially Disadvantaged Students
3. Educationally Disadvantaged Students
4. Limited English Speaking Ability Students (LESA)
5. Non-Traditional Major Students
6. Displaced Homemakers
7. Physically Handicapped Students.

This section will contain a short description of each. The next report on the Statewide Longitudinal Study, Part 4, will be devoted to Ethnic Minorities, Financially Disadvantaged, Educationally Disadvantaged, and Limited English Speaking Students. There were too few Non-Traditional Major, Displaced Homemaker and Physically Handicapped students in the study for generalization. However, an attempt will be made to classify the problems experienced by these groups to provide the basis for a separate study of them.

Table 29 shows the breakdown by Ethnicity. There are no significant differences between Vocational and Non-Vocational, or between Attending and Non-Attending Students.

Data on these groups will be analyzed in further detail in the next report, Part 4, since there are sufficient Black, Hispanic, and White students for generalization. The data on Asian/Pacific Islander students must be viewed with caution since the date of sampling (Fall, 1978) antedates the heavy influx of students from Southeast Asia (the "Boat People").

Financially Disadvantaged students were self-identified by their responses to the question: "Do you think that money will be a problem for you?" Interviewers were taught to differentiate between actual need and money problems associated with expensive hobbies, e.g., skiing. There were no appreciable differences between Vocational and Non-Vocational or between Attendees and Non-Attendees (Table 30). Since approximately 15% of the students in the study identified themselves as Financially Disadvantaged, the numbers are sufficient for generalization. A more complete report on these students will be included in Part 4 of this report.

Educationally Disadvantaged students were also self-identified by their response to the question: "Do you think you will have problems with things like reading and math?" Table 31 shows that 15% of the sample said they were Educationally Disadvantaged. The percentage of Non-Vocational Students thus identified is higher (18% to 14%) than Vocational students. There were no appreciable differences between Attending and Non-Attending students on this variable.

These students will be discussed more fully in Part 4 of this report.

Limited English Speaking Ability students were identified by the interviewers from their accents. Eighteen percent of the sample were identified as having an accent (Table 32). Of these, 3% spoke no English, 44% had Limited English, 7% spoke grammatical, but accented English, and 46% had fluent command (good grammar, slight accent) of English. The numbers of those with no English are too small for generalization. Two explanations for these

small numbers are presented. It is probably that those with no English fear participation in post-secondary education and are in Adult Education classes in local high schools, it is also possible that simple ignorance (arising from their lack of ability with English) keeps these people from attending community colleges.

Comparing Vocational and Non-Vocational Students, 18% of both groups spoke with an accent. There is a difference between Attendees and Non-Attendees, however. Twenty percent of Non-Attendees had an accent, compared with 11% of Attendees. This indicates that those who have some trouble with English may have less staying power in community college. Among Non-Vocational students, the difference was similar between Attendees and Non-Attendees (20% and 17%). Among Vocational Students, the percentage difference was marked. Only 14% of Attending Vocational Students had an accent, compared with 23% of Non-Attending Vocational Students (see "Not Applicable").

Without further examination of the data, there is no way of knowing whether the last difference represents a greater proportion of students who had met goals, or dropouts who were unable to complete their work because of language problems. The latter hypothesis appears the more tenable. A more complete report will be included in Part 4.

The data in Table 33 show that only 2% of the sample identified themselves as being in a major non-traditional for their sex. This represents too small a sample for generalization, and will not be included in Part 4.

As shown in Table 33, only 3% of the respondents identified themselves as Displaced Homemakers. As with Non-Traditional Major,

this group is too small for discussion or generalization. It will not be included in Part 4 of this report.

Only 4% of the respondents were PHYSICALLY HANDICAPPED. This was distributed over seven categories (Table 35) from 1% for Orthopedic Handicap to one tenth of 1% for Speech Handicap. Since the numbers are too small for generalization, information on this group will not be included in Part 4 of this report.

Variable 163

Table 29

ETHNICITY

	VOCATIONAL**			NON-VOCATIONAL**			TOTALS**		
Valid Cases	1,087	1,066	2,251	1,206	1,502	2,848	2,424	2,617	5,573
Sample Size	1,121	1,135	2,355	1,259	1,618	3,020	2,514	2,802	5,892
	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %
American Indian/ Alaska Native	0	1	1	1	1	1	1	1	1
Asian Pacific Islander	8	6	6	9	6	7	8	6	7
Black	8	6	7	10	9	9	9	9	9
Hispanic	14	12	13	14	13	14	14	12	13
White	68	73	71	64	70	68	66	71	69
Other	2	2	2	2	1	3	2	1	2
Missing	(3)	(6)	(4)	(4)	(7)	(6)	(4)	(7)	(5)

**Individual categories will not sum to totals (see explanation p. 12).

Table 30

Variable 166

FINANCIAL DISADVANTAGE

	VOCATIONAL **			NON-VOCATIONAL**			TOTALS**		
Valid Cases	1,044	921	2,064	1,171	1,432	2,745	2,343	2,384	5,254
Sample Size	1,121	1,135	2,355	1,259	1,618	3,020	2,514	2,802	5,892
	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %
Yes	17	14	15	17	14	16	17	14	15
No	83	86	85	83	86	84	83	86	85
Missing	(7)	(19)	(12)	(7)	(12)	(9)	(7)	(15)	(11)

Table 31

Variable 167

EDUCATIONAL DISADVANTAGE

	VOCATIONAL**			NON-VOCATIONAL**			TOTALS**		
Valid Cases	1,042	919	2,060	1,167	1,435	2,744	2,337	2,384	5,249
Sample Size	1,121	1,135	2,355	1,259	1,618	3,020	2,514	2,802	5,892
	ATT.	N-ATT.	TOTAL	ATT.	N-ATT.	TOTAL	ATT.	N-ATT.	TOTAL
Yes	15	13	15	19	17	18	16	15	15
No	85	87	86	81	83	82	84	85	85
Missing	(7)	(19)	(13)	(7)	(11)	(9)	(7)	(15)	(11)

** See footnote p. 51.

Table 32

Variable 168

LIMITED ENGLISH-SPEAKING

	VOCATIONAL**			NON-VOCATIONAL**			TOTALS**		
Valid Cases	104	68	183	169	104	304	278	176	519
Sample Size	1,121	1,135	2,355	1,259	1,618	3,020	2,514	2,802	5.892
	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %
No English	1	0	1	3	4	4	2	2	2
Limited English	33	39	35	33	52	41	33	48	39
Good English	34	12	23	23	7	16	26	9	18
Fluent English	33	49	41	41	38	40	39	42	41
Not Applicable	(86)	(77)	(82)	(80)	(83)	(81)	(83)	(80)	(81)
Missing	(5)	(17)	(11)	(7)	(11)	(9)	(6)	(14)	(10)

Table 33

Variable 169

NON-TRADITIONAL MAJOR

	VOCATIONAL **			NON-VOCATIONAL **			TOTALS **		
Valid Cases	1,076	1,041	2,215	1,188	1,618	2,784	2,391	2,544	5,462
Sample Size	1,121	1,135	2,355	1,259	1,618	3,020	2,514	2,802	5,892
	ATT.	N-ATT.	TOTAL	ATT.	N-ATT.	TOTAL	ATT.	N-ATT.	TOTAL
Yes	3	2	3	2	2	2	2	2	2
No	97	98	97	98	98	98	98	98	98
Missing	(4)	(8)	(6)	(6)	(10)	(8)	(5)	(9)	(7)

**See footnote p. 51.

Table 34

Variable 165

DISPLACED HOMEMAKER

	VOCATIONAL **			NON-VOCATIONAL**			TOTALS **		
Valid Cases	1,064	1,062	2,215	1,162	1,445	2,738	2,357	2,544	5,407
Sample Size	1,121	1,135	2,355	1,259	1,618	3,020	2,514	2,802	5,892
	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %	ATT. %	N-ATT. %	TOTAL %
Yes	1	2	2	2	2	3	2	2	3
No	99	98	98	98	98	97	98	98	98
Missing	(5)	(6)	(6)	(8)	(11)	(9)	(6)	(13)	(8)

Table 35

Variable 164

HANDICAP

	VOCATIONAL**			NON-VOCATIONAL **			TOTALS **		
Valid Cases	1,050	934	2,083	1,178	1,445	2,765	2,356	2,410	5,294
Sample Size	1,121	1,135	2,355	1,259	1,618	3,020	2,514	2,802	5,892
	ATT.	N-ATT.	TOTAL	ATT.	N-ATT.	TOTAL	ATT.	N-ATT.	TOTAL
Hard of Hearing	0	0	0	0	0	0	1	0	0
Deaf	1	0	1	1	1	1	1	1	1
Speech	0	0	0	0	0	0	0	0	0
Visual	0	1	0	0	0	0	0	0	0
Orthopedic	1	1	1	1	1	1	1	1	1
Other	1	0	1	1	1	1	1	1	1
Multiple	0	0	0	0	0	0	0	0	0
None	96	97	96	97	97	97	96	97	96
Missing	(6)	(18)	(12)	(6)	(11)	(8)	(6)	(14)	(10)

**See footnote p. 51

Summary and Conclusions

The end of Fall, 1979 marks the halfway point of the projected three years of the Study. It is appropriate to summarize the findings at this point.

Student Prototypes

Pre-eminent among the accomplishments of the study is the tentative definition and identification of student prototypes. These were discussed in the SLS Report and refined during Fall, 1979, Part 2 (Sheldon and Hunter, 1979). The prototypes are an attempt to classify the work of California Community Colleges according to the aspirations, enrollment patterns and achievements of students. Data will be collected on the prototypes during Spring, 1980, and statistical validation of them will be carried out during the academic year 1980-81.

Six prototypes fall into the transfer category, five are uniquely in the vocational category (though others take vocational courses), and six fall into the general interest or leisure-time category. They are as follows:

I Transfer

- a. Fulltime Transfer Student
- b. Part-Time Transfer Student
- c. Transfer/Technical Major
- d. Unmotivated Transfer
- e. Expeditor
- f. Intercollegiate Athlete (claims transfer goal)
- g. Financial Support Seeker (claims transfer goal)

II Vocational

h. Vocational Career program completer

i. Job Seeker

j. Improving job skills student

k. Second Careerist

l. License Maintainer

III Leisure Time

m. Leisure Skills Student (takes Vocational courses)

n. Education Seeker

o. Art and Culture Student

p. Explorer/Experimenter

q. Basic Skills Student (Math and Reading, chiefly)

r. Lateral Transfer Student.

The prototypes listed above are defined partially by their stated goal, and partly by their performance as measured by course completion and G.P.A. Age, job-skill level and rate of pay are among other variables used in making the determination.

The importance of these findings lies in the capacity for increased understanding of the community college "mission" they provide. It has become evident during the study that students tend to generate their own goals, enroll in and drop classes at will, glean from courses the information they want, and leave when their own personal goals have been achieved or are not being met. This indicates that the mission of community colleges is determined to a far greater extent by the students than by other groups, e.g., Boards of Trustees, academic senates, college administrations.

This finding indicates that the usual administrative method of judging instructional outcomes, credits and grades is NOT valid for students who are only interested in raises, promotions and personal satisfaction. Many vocational students seek raises or promotions through the acquisition of job skills and do not complete courses or take examinations after their goal has been reached. Other students attend for leisure-time reasons, are disinterested in credit or grades, and frequently do not complete assignments or take examinations.

If the assumption is made that student failure to receive a passing grade means instructional failure, then California community colleges will suffer unmerited and unfair criticism. If the real value of community colleges is to be assessed, supplementary procedures for judging instructional outcomes must be developed. For vocational students, this probably must involve a measure of student satisfaction judged by performance on the job, promotions earned and raises received.

Reporting From Sample Data

To determine the feasibility of using small-sample reporting in place of census reporting, comparisons were made between the aggregated participating college data and statewide census data supplied by the State Chancellor's Office. These comparisons were made on SEX ratio, AGE, and ETHNICITY.

Comparisons between sample and census data on SEX ratio and ETHNICITY showed no meaningful difference between census and sample data. As expected, there were differences on AGE, though the mode was the same and both distributions had an extreme positive skew. The difference is partially attributable to the fact that the sample

consisted of first-time admittees containing a large proportion of students just out of high school, while the census figures were drawn from the population as a whole. This finding indicates that reports to the state and federal governments based on random samples rather than entire populations can yield reliable information.

Attrition

Three aspects of attrition were investigated. The first involved those students with zero active units by first census week of Fall, 1978; the second, members of the sample who dropped classes subsequently; and the third, those who left school after one or more semesters, but before completing any program.

Those with zero active units (ZAUS) gave reasons for withdrawal, most of which fall into categories of:

1. Conflict with job (15% of responses)
2. Indefinite Motivation (12% of responses)
3. Classes closed or cancelled (12% of responses)
4. Accepted another college (11% of responses)
5. Preference for Job over Education (11% of responses)
6. Moved (7% of the responses)
7. Illness (6% of the responses)

The above accounts for 74% of the responses. Indefinite Motivation was an interviewer estimate of the level of respondent maturity and commitment; Preference for Job over Education was for those students who preferred holding a job to continuing their studies.

Those who had active units at first census week, but subsequently dropped classes, did so for the following reasons:

1. Conflict with Job (23% of responses)
2. Disliked Class Content (10% of responses)

3. Indefinite Motivation (10% of responses)
4. Underprepared for Class (7% of responses)
5. Preference for Job over Education (6% of responses)
6. Personal Dislike of Instructor (4% of responses)
7. Class Switching (4% of responses).

Underprepared for Class referred to the student's recognition that he/she possessed insufficient academic skills for the class. Class Switching referred to those students who dropped a class for the purpose of signing up for the same class at a more convenient hour. The above reasons accounted for 64% of responses given.

These data show that many of the reasons for attrition involved issues over which colleges have neither control nor responsibility. Financial difficulty did not contribute significantly to attrition despite the fact that 24% of students who stated that they were financially disadvantaged were not aware that financial aid was available.

Students who left college after one or more semesters were asked to give their reasons. The reasons given showed a sharp distinction between Vocational and Non-Vocational Students. They are as follows:

1. Met Objective (14% of Vocational, 6% of Non-Vocational responses).
2. Conflict with another school; e.g., conflict in class hours (2% of Vocational responses, 6% of Non-Vocational responses).
3. Job Conflict (20% of Vocational, 27% of Non-Vocational responses).
4. Preference for job over school(12% Vocational, 7% of Non-Vocational responses).
5. Indefinite Motivation (8% of Vocational responses, 12% of Non-Vocational responses).

6. Transfer (7% of Vocational, 8% of Non-Vocational responses).

7. Underprepared (8% of Vocational, 7% of Non-Vocational responses).

The above accounts for 71% of Vocational and 73% of Non-Vocational responses. Of the seven reasons, two (Met Objective and Transfer) might be called "Positive," three (Conflict with another school, Job Conflict and Preference for job over school) might be called "Neutral," and two "Negative" (Indefinite Motivation and Underprepared). Only the last two appear to be under college responsibility and control. They may indicate a need for better counseling.

Special Student Groups

Seven student groups were identified for special study of potential problems. These were:

1. Ethnic minority students.
2. Physically Handicapped students
3. Educationally Disadvantaged Students
4. Financially Disadvantaged Students.
5. Limited English Speaking Ability students (LESA)
6. Displaced Homemakers
7. Students in majors non-traditional for their sex.

The numbers of students found to be Physically Handicapped, Displaced Homemakers, and Non-Traditional Majors were too small for generalization. A report was made of the problems encountered by the members of these groups, but no further investigation could be made.

Few ethnic minority students reported problems. Approximately 15% of students reported themselves as educationally disadvantaged; it is not yet possible to report on the long-term solutions to these problems.

LESA students were characterized by their relative fluency with English (No English, Limited English, Fluent English). Few of the first category were found. Among the others, the highest percentage of students experiencing difficulty were Asians from purely Asian-speaking households, with those from purely Hispanic households running a close second. Asians and Hispanics from bilingual households had less problems. These data must be viewed with caution since the 1978 sample antedated the heavy influx of immigrants from southeast Asia which has taken place since then.

Comparison of Vocational and Non-Vocational Students

Comparisons between Vocational and Non-Vocational Students provided no important differences in demographics. Little difference was observed in grade point average, but Vocational Students were more productive in credit earned than Non-Vocational Students. In addition, Vocational students completed objectives more completely, had fewer conflicts with their jobs and had a better understanding of their college goals than Non-Vocational Students. They also had higher-skill-level jobs and were more highly paid than Non-Vocational Students.

Comparison of Day and Evening Students

Day and Evening students were found to be two different populations. Evening students were older, more of them were married and had dependents; they also had higher-skill-level jobs and were paid more highly than Day students.

Day students tended to favor preparation for transfer and pre-employment training over other reasons for attendance. Evening students tended to concentrate on inservice training, and training for additional or second career jobs. Evening students tended

to be more stable in terms of maintaining attendance, but took fewer courses; they also received credit for fewer courses than day students. This last is seen as more of a function of their disinterest in college credit than poor scholarship. Interview data indicate that older students tend to equate course outcomes with personal satisfaction, raises on the job and job promotions more than Day students.

Comparison of Attending and Non-Attending Students

Comparing Attendee and Non-Attendee students during Fall, 1979, it was found that Attending students were significantly younger than Non-Attending students. The mean age for Attendees was 24.5 years, and that for Non-Attendees was 28.3. This difference appeared to affect a number of other variables. For example, fewer Attendees were married and had dependents, Attendees have lower-skill-level jobs and earn less per hour than Non-Attendees. Further, among Attendees there is a higher proportion taking vocational courses than among Non-Attendees.

Among Attendees, 30% said they wanted to transfer to a four-year college, 36% were attending for job-related reasons, and 22% were attending for leisure-time education. Only 6% were attending for the sole purpose of getting an A.A. degree.

Twenty-four percent of Attendees were preparing for a first-career job, 9% to increase job skills for a current job, and 4% were preparing for a second career or after-hours job.

Among Attending Vocational Students, 25% said they planned to transfer to a four-year college, providing the rationale for the Technical Transfer prototype. Thirty percent were preparing for a first-career job, 11% to improve job skills on a current job, and

5% were obtaining skills for a second career or an after-hours job.

Among Non-Attendees, a greater percentage of Vocational than Non-Vocational Students felt they had met their goals completely (42% to 34%). An equal percentage of each group (39% to 41%) felt they had met them somewhat; fewer Vocational than Non-Vocational Students (19% to 24%) felt they had met them not at all.

Trends in improvement in jobs and hourly pay are discernible in the data. Non-Attending Vocational Students hold higher-skill-level jobs than Non-Vocational students, report more improvement in their jobs; the differences in hourly pay are too slight to be significant at this time. It is probably too early in the study to expect significant changes after only a year and a half.

The Study

Finally, a great deal has been learned about the feasibility of conducting a longitudinal study of this nature. Proven procedures now exist for collecting common data in a standard fashion across 15 colleges separated from each other by hundreds of miles. It has been possible to develop a sense of interest and commitment in a 35-member Consortium consisting of members of participating colleges, representatives of major universities, the Chancellor's Office and other groups, e.g., the R & D Commission of CCJCA, CPEC, NOR CAL, SCCIRA. Problems such as attrition are troublesome, but manageable. In short, it has been found that a longitudinal project of this magnitude can produce data that is reliable and is valid for the purposes of investigating the effects of community college on the lives of students.

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BIBLIOGRAPHY

GOLD, Ben, Student Accountability Model Chancellor's Office, California Community Colleges, 1978

SHELDON, M. Stephen and HUNTER, Russell, Statewide Longitudinal Study; Report on Academic Year 1978-79, Part 2, Spring Results, 1979